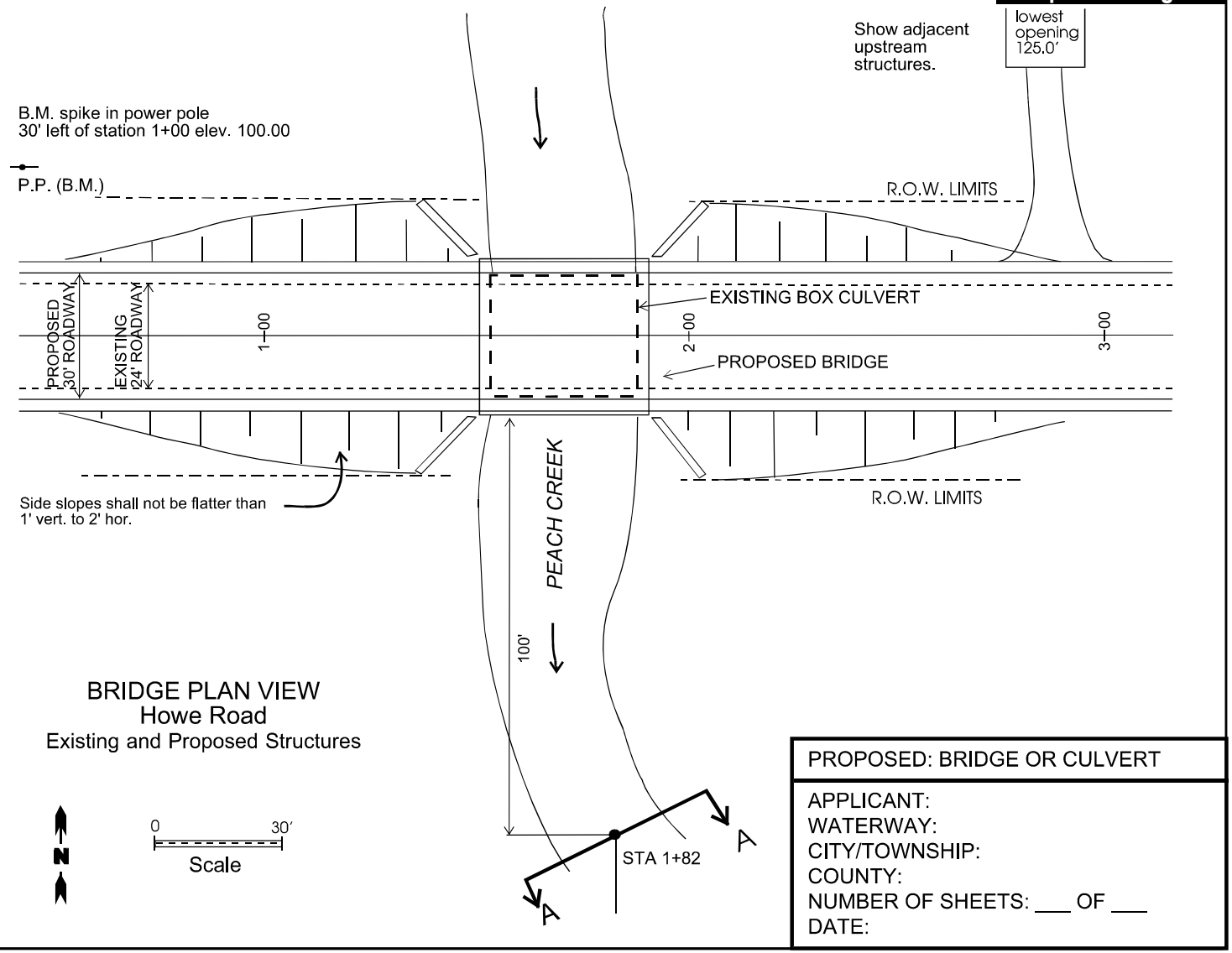
Proposed Bridges and Culverts:

Complete **Section 14** and **Sections 10A, 10B, 10C, 12, 13, and 15** if applicable to your project.

- ❑ Provide an overall site plan showing existing lakes, streams, wetlands, and other water features. Include name of waterbodies, property boundaries, and neighboring property owner information.
- ❑ Provide detailed site-specific drawings of existing **and** proposed *Plan View* (Sample Drawing 14A), Elevation View (Sample Drawing 14B), Stream and *Floodplain Cross-Sections* (Sample Drawing 14C), and Stream Profile (Sample Drawing 14D) adequate for detailed review.
- ❑ If your project includes *floodplain* fill complete **Section 13** and include a site-specific drawing (See Sample Drawing 5).

Sample Drawing 14A



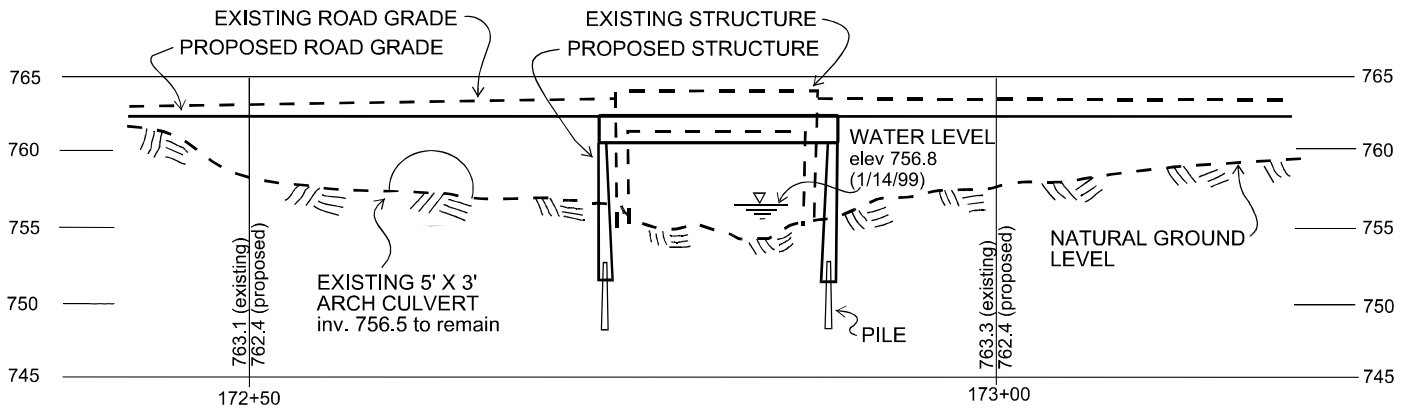
BRIDGE PLAN VIEW
Howe Road
Existing and Proposed Structures

PROPOSED: BRIDGE OR CULVERT
APPLICANT: WATERWAY: CITY/TOWNSHIP: COUNTY: NUMBER OF SHEETS: ___ OF ___ DATE:

Bridge or Culvert Plan View

- ❑ Existing and proposed *structures* and approaches.
- ❑ Property boundaries and or right-of-ways (ROW).
- ❑ Description of reference point and datum used (NGVD 29, IGLD 85 or local).
- ❑ Location of *cross-section* or elevation views.
- ❑ *Soil erosion and sedimentation control measures*.

Sample Drawing 14B



BRIDGE ELEVATION VIEW
Existing and Proposed Structures

0 10′
Scale

Elevations in Feet

PROPOSED: BRIDGE OR CULVERT

APPLICANT:
WATERWAY:
CITY/TOWNSHIP:
COUNTY:
NUMBER OF SHEETS: ___ OF ___
DATE:

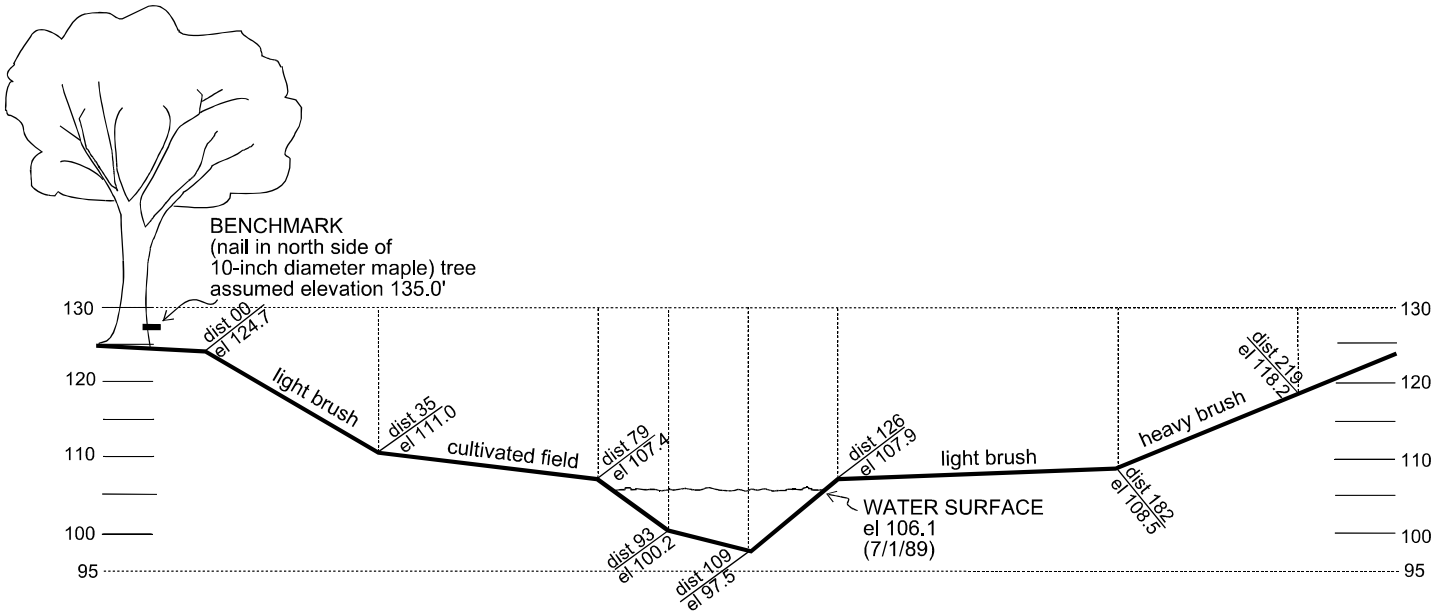
Bridge or Culvert Elevation View

- ❑ Observed and highest known water elevations (ft) and dates of observations (M/D/Y).
- ❑ *100-year floodplain* elevation (if known).
- ❑ Basement floor and finished first-floor elevations (ft) of nearby homes and buildings.
- ❑ Elevation *of ordinary high water mark* (OHWM).

Existing and proposed:

- ❑ *Structure* elevations.
- ❑ Road grade and elevation of low points in road.
- ❑ Distance from low point of road to mid-point of *structures*.
- ❑ Upstream and downstream elevations (ft) of culvert crown or bottom of bridge beam.
- ❑ If culvert, higher elevation of pipe invert or streambed within pipe.

Sample Drawing 14C



CROSS-SECTION A - A
(Looking Downstream)

Cross-section downstream of proposed replacement structure
typical to the watercourse involved
and taken perpendicular to flood flows

Scale
0 20′
vertical
0 30′
horizontal

Elevations in Feet
el = grade point elevation in reference
to the assumed benchmark

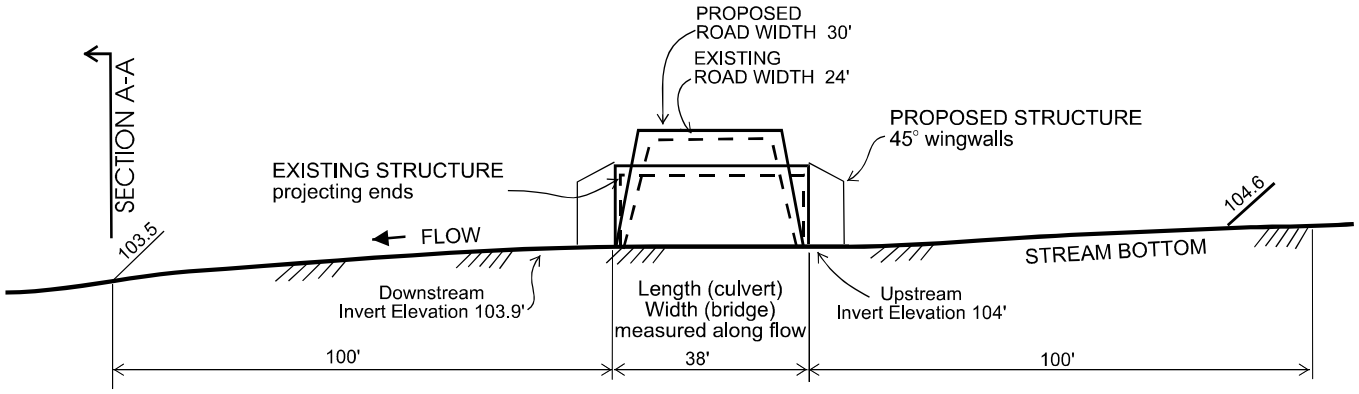
EXISTING & PROPOSED CROSS-SECTION

APPLICANT:
WATERWAY:
CITY/TOWNSHIP:
COUNTY:
NUMBER OF SHEETS: ___ OF ___
DATE:

Stream and *Floodplain* *Cross-Section* View

- ❑ All proposed projects need to provide the channel dimensions.
- ❑ Description of reference point and datum used (NGVD 29,IGLD 85, or local).
- ❑ Highest known and observed water elevations (ft) and dates of observations (M/D/Y).
- ❑ *100-year floodplain* elevation (if known).
- ❑ Descriptions of overbank vegetative cover within the *floodplain*.
- ❑ Elevation of *ordinary high water mark* (OHWM).
- ❑ If upstream channel and overbank dimensions and/or vegetative cover differ significantly from the downstream conditions also provide an upstream cross-section.

Sample Drawing 14D



STREAM PROFILE VIEW
Existing and Proposed Structure,
Invert Elevations and End Treatment

Scale
0 20′
vertical
0 30′
horizontal

PROPOSED: BRIDGE OR CULVERT
APPLICANT: WATERWAY: CITY/TOWNSHIP: COUNTY: NUMBER OF SHEETS: ___ OF ___ DATE:

Stream Profile View

- ❑ Datum used (NGVD 29, IGLD 85, or local).
- ❑ Location of *cross-sections*.

Show existing and proposed:

- ❑ Road width and culvert length or bridge width (ft).
- ❑ Upstream and downstream invert elevations (ft)
- ❑ *100-year floodplain* profile (if known).